

Sustainable Value: Sustainable Bond Issuance as an Investor Signal

Executive Summary

Fixed income products have long been a staple of any well-diversified portfolio, but historically investors seeking positive social and environmental impact have focused on asset classes such as private equity or the stock markets. While still a fraction of the total bond market, sustainable bonds, led by green bonds targeting environmental impact, have more than tripled since 2015.¹

Such bonds have been expanding beyond *green* as issuers pursue sustainability objectives more broadly. This has given rise to a growing cadre of *social* and *sustainability* bonds, with social benefits instead of or in addition to environmental impact. Throughout this paper, we refer to the range of bonds with impact objectives—green bonds, social bonds and sustainability bonds—as *sustainable bonds*.

For issuers of all types, sustainable bonds offer more than just access to capital. They send an important signal to the market about an organization's strategic priorities. They can be a valuable tool for issuers to amplify sustainability strategy, demonstrate proactive

risk management, commit to long-term impact and offer a financing and communications tool that can be tied to measurable (and auditable) results.

In this brief, the Morgan Stanley Institute for Sustainable Investing explores the ways that issuers across sectors have signaled business and investor value through sustainable bonds.

67.6%

growth of green bond issuance
from 2016 to 2017.²

Sustainable Bonds

There are a variety of types of fixed income instruments for which proceeds are dedicated to social and/or environmental projects. In this brief, we refer to such instruments as sustainable bonds.



Green bonds raise capital for projects with dedicated environmental benefits.



Social bonds raise capital for projects with dedicated social benefits.



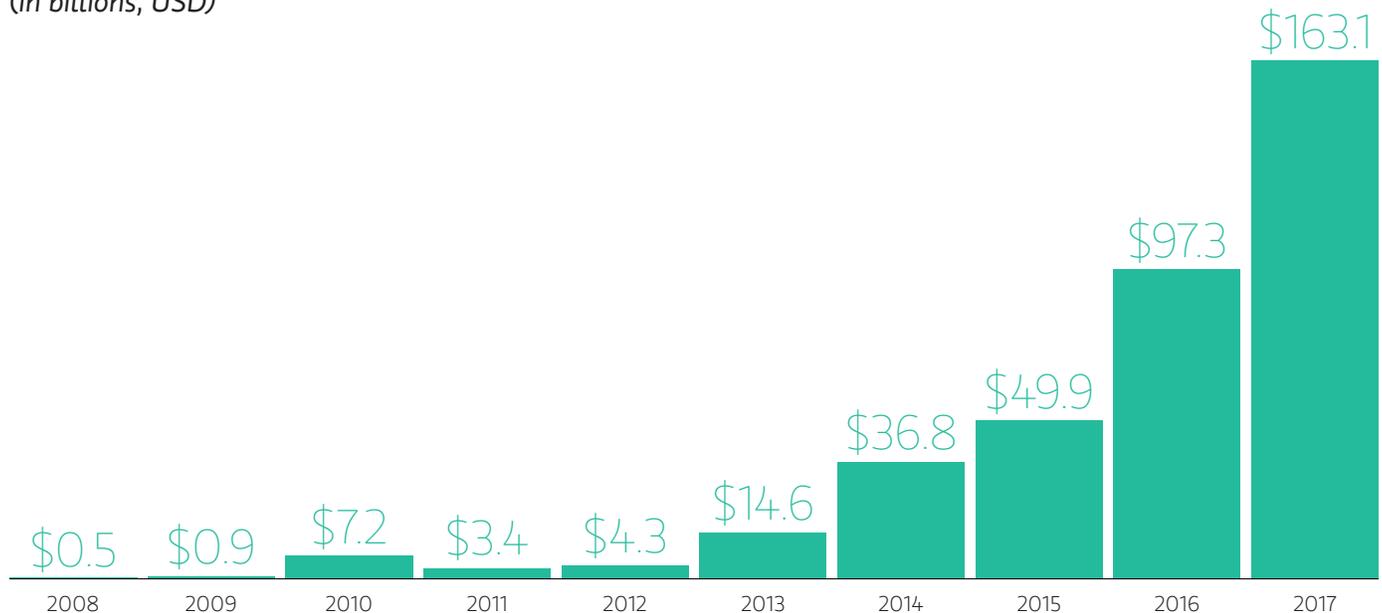
Sustainability bonds raise capital for projects with a mix of social and environmental benefits.

A Growing Market

While the types of sustainable bonds are rapidly diversifying, the most well established among them are green bonds. In 2008 green bond issuances stood at just US\$500 million. Issuance nearly doubled between 2015 and 2016 and grew nearly 68% in 2017, with total issuance in excess of US\$160 billion.³

Annual Green Bond Issuance

(in billions, USD)



Source: Bloomberg New Energy Finance, January 2018.

While such rapid growth in a nascent market is noteworthy, there is still much room for green bonds to grow. Today, they represent under 1% of the more than US\$20 trillion annual bond market.⁴ Nevertheless, the growth of green bonds reflects several domestic and global trends. Globally, around US\$90 trillion in infrastructure investments will be needed to keep pace with the needs of a growing and increasingly urban population. National governments are increasing their focus on green bonds as the global community seeks funding to meet its greenhouse gas emissions reduction targets under the Paris Climate Accord. In 2016, China issued 39% of new green bonds, which now make up 2% of the Chinese bond market.⁵ And in late 2016 France issued the largest green bond to date, at €7 billion, to fund its own efforts under the Climate Accord.⁶

Further, France now requires institutional investors to disclose how environmental, social and governance (ESG) factors, including climate change risk, are integrated into their investment policies. Sustainable bonds can offer a tangible way to manage and mitigate climate risk.

Even as the United States has announced plans to withdraw from the Climate Accord, U.S. businesses and municipalities have come together as a driving force for climate action. At the COP23 climate negotiations in Bonn, Germany, in November, 2017, more than 2,500 U.S. state and municipal governments, companies and organizations were represented by the We Are Still In coalition, which has called for continued progress toward the United States' commitments.

Looking beyond climate change, the public and private sectors alike have turned significant attention to the UN Sustainable Development Goals (SDGs) as a North Star vision for a more sustainable future. The long-term nature and vast scale of solutions needed under the SDGs are ripe for sustainable bond financing. The breadth of the SDGs creates a useful framework for issuers and investors alike to think about how social and environmental impacts are connected. For example, PIMCO, the global fixed income investment management firm with over US\$1.75 trillion in assets under management, is encouraging issuers to tie financing to the SDGs and report on progress toward them.⁷

The interest in the SDGs is indicative of a larger trend of issuers thinking holistically about their ESG activities rather than approaching environmental, social and governance management separately. Sustainable bonds can reflect the many ways that social and environmental issues are interconnected, and help issuers address them across an organization or value chain.

Sustainable Investing on the Rise

Investors are increasingly looking to align their portfolios more closely with their values, and sustainable bonds offer an opportunity to diversify holdings while meeting a variety of investment objectives.

In 2017, the Morgan Stanley Institute for Sustainable Investing found that among individual investors, 75% are interested in sustainable investing, 71% believe that companies with leading sustainability practices may be better long-term investments and 80% are interested in customizing their portfolios to meet their own impact goals.⁸ Among Millennials, who stand to inherit US\$30 trillion in the next three to four decades,⁹ interest in sustainable investing is even stronger.¹⁰

Institutional investors are integrating ESG into their strategies as well. BlackRock, the world's largest asset manager, with US\$6.29 trillion in assets under management, announced in its 2018 letter to CEOs that the firm will increasingly consider companies' contributions to society in investment decisions.¹¹ And ratings agencies increasingly view ESG as an important determinant of credit risk. The Principles for Responsible Investing (PRI) have been actively working to advance ESG in credit ratings since 2015,¹² and in 2017, Moody's announced a new approach to incorporating ESG into credit analysis.¹³

Sustainable Bond Performance

Green, social and sustainability bonds are just like conventional bonds in the way that they are structured and issued, but with proceeds designated for sustainable projects. While some sustainable bonds do pose additional reporting and transparency requirements, issuers increasingly view this as a worthwhile investment in return for the potential of sustainable bonds to enhance sustainability reputation, diversify investor base and attract new capital.

Most new green bond issues are oversubscribed and they have been shown to price tighter than initial guidance.¹⁴ In the municipal market, sustainable bonds are attractive to retail investors who are looking to add sustainable investments to their portfolios while maintaining the financial benefits of tax exemption.

In the secondary market, green bonds typically trade flat to conventional unsecured bonds, and for some sectors and maturities, they have exhibited stronger returns.¹⁵ An analysis of 121 corporate and government green bonds by Morgan Stanley Research found that green bonds generally offer similar spreads to conventional bonds and do not necessarily sacrifice market-rate returns.¹⁶

Opportunities Remain

We believe that sustainable bonds are here to stay and will likely continue to grow as a share of the total bond market. Yet, challenges remain. At less than 1% of the bond market, sustainable bonds are not yet a mainstream product. More education about their use, costs and benefits is needed — for issuers and investors alike.

Issuers raise concerns about the additional reporting and transparency requirements associated with sustainable bonds. And investors ask questions about the metrics and standardization of what qualifies.

The International Capital Market Association's (ICMA) Green Bond Principles, Social Bond Principles and Sustainability Bond Guidelines are broad and flexible, which over time, will allow issuers and investors to identify best practices that meet both parties' needs. As early adopters of sustainable bonds lay more groundwork and build a track record of success, we anticipate the market will become more efficient.

A Note on Social Impact Bonds

While this paper explores the opportunities associated with sustainability, social and green bonds, we do not discuss social impact bonds. Social impact bonds, also known as Pay for Success Financing, are fixed-term contracts for which repayment is tied to performance against specific impact objectives.

Sustainable Bonds in Practice

But what qualifies as a sustainable bond? Put simply, sustainable bonds are like traditional fixed income instruments, but the use of proceeds is specifically designated for projects with clearly defined environmental or social benefits.

The most widely accepted guidance for sustainable bonds is set out by the International Capital Market Association. Three sets of voluntary principles for green bonds, social bonds and sustainability bonds, offer guidance for the use of proceeds, project selection, management and reporting. Additional disclosure and tracking is preferred to ensure the capital being borrowed from investors is continuing to fund the identified projects and not being misappropriated.

Traditionally, sustainable bonds have funded environmental improvements through capital expenses such as energy efficiency retrofits, renewable energy procurement, green building practices, clean transportation and wastewater management systems. Recent years, however, have seen an uptick in innovation among green bond issuers as they think beyond the low-hanging fruit and consider sustainability as part of production and sourcing rather than just the facilities footprint.

While new sustainable bond issues were once dominated by multilateral development banks, now municipalities, governments, corporations and even nonprofits have become important issuers as all actively consider the ways to transform their existing practices, operations and infrastructure to meet the needs of the next generation.

Municipalities

The municipal market is particularly well suited for sustainable bonds. By their nature, municipal bonds fund projects that benefit the public good, including mass transit, affordable housing and infrastructure. In 2016, there were approximately US\$7.6 billion in municipal green bonds sold; that number grew by roughly 45% in 2017 to US\$11 billion.¹⁷ In the United States, municipal green bonds have grown by 105% CAGR over the last five years.¹⁸

AURORA, COLORADO, GREEN BOND

In July 2016, the City of Aurora, Colorado, issued a US\$437 million First-Lien Water Refunding Revenue Bond, which was the largest U.S. municipal water revenue green bond issued to date. The issue was 1.7 times oversubscribed, with orders totaling US\$757.9 million from institutional investors and professional retail accounts.

Proceeds refinanced debt issued to fund the Prairie Waters Project, which uses innovative technology to recapture river water, protect the region against drought risk and deliver up to 12 million gallons of purified water per day.¹⁹

Sovereigns

With the global community rallying around support for the Paris Climate Accord, sovereign sustainability and green bonds are on the rise since Poland issued the first of its kind in 2016. Of particular note, in 2017 France issued the largest green bond to date as part of its commitment to meeting its own climate goals.

FRANCE GREEN BOND

In January 2017, France issued a 22-year green bond worth €7 billion, which represents the largest scale of any green bond issued to date. Issued at 1.741%, the bond demonstrates that raising capital for sustainability is cost competitive, as the country's average outstanding debt rate is 2.0%.²⁰

With total orders surpassing €23 billion, investor interest significantly outpaced the scale of this bond and reflected a diverse mix of investors types and geographies. One third of investors were asset managers, followed by banks, pension funds, insurers, institutions and hedge funds.²¹

Proceeds from the bond will support France's commitments under the Paris Climate Accord and the objectives set out in the 2015 Energy Transition for Green Growth Act.

Corporates

Leading corporations have already tackled much of the low-hanging fruit when it comes to sustainability through cost-cutting measures such as lighting retrofits. But consumers are demanding more from the companies they support²² and sustainable bonds can offer a valuable way for companies to raise capital while signaling a long-term commitment to sustainability.

UNILEVER GREEN BOND

In 2014, Unilever issued its sector's first green bond, raising £250 million at 2.0% to support sustainability investments under the company's Sustainable Living Plan.

Proceeds were dedicated for projects including facility investments in South Africa, China, Turkey and Kansas that were designed to reduce greenhouse gas emissions, water consumption and waste generation by 50% for new factories and 30% for retrofits.²³

Nonprofits

While higher education and healthcare institutions have an established history of raising funds through bond markets, smaller and more varied nonprofits have begun to view sustainable investors as a source of funds. By tapping into the bond market, nonprofits may be able to bring new scale and long-term capital to projects that once relied on a patchwork of government and philanthropic grants.

LISC SUSTAINABILITY BOND

In early 2017, the Local Initiatives Support Corporation (LISC), a community development financial institution (CDFI) that supports community and economic development across the United States, was looking to refinance a loan portfolio to help revitalize communities.

LISC turned to the bond market to raise US\$100 million through 10- and 20-year term bonds in a first-of-its-kind bond offering from a CDFI. Earning an S&P AA investment-grade credit rating,²⁴ LISC's offering demonstrates that the capital markets may be a favorable source of long-term, affordable funds for nonprofit organizations.

Sustainable Bonds and Investor Signals

Beyond providing much-needed capital for sustainability efforts, sustainable bonds can be a valuable tool for issuers to amplify sustainability strategy, affirm proactive risk management, signal long-term commitments and offer a communications tool that is tied to real results. These benefits may position bonds as an effective tool for companies, municipalities and other issuers to communicate their values to investors.

Amplify Strategy

Issuing a sustainable bond not only signifies that an issuer is taking sustainability seriously and making significant investments into such practices, but it can also demonstrate how an issuer is thinking about or prioritizing related activities. As the host of the United Nations negotiations that led to the Paris Climate Accord, France has set its eyes on leadership in the transition to a low-carbon economy. As the largest and longest-dated green bond ever issued, France's €7 billion issuance signals that the country is taking a sharp and robust approach to achieving the objectives set forth in the 2015 Energy Transition for Green Growth Act. These include efforts to increase reliance on renewable energy, reduce consumption and tax greenhouse gas emissions while working toward environmental goals that include a 40% reduction in greenhouse gas emissions by 2030.²⁵ Putting €7 billion behind these efforts signals that the energy transition is a major priority for the country and the necessary tools are being put in place to achieve them. Such a large strategic signal to the market may lead to further private investment in development of renewable energy technology within the country and create future opportunities for collaboration across sectors.

Manage Risk

By making a long-term investment in sustainability, issuers can also signal that they are taking a proactive approach to risk management. Climate risks can be long term and abstract when viewed in the context of an earnings cycle or tax year. However, climate-related natural disasters and crises do pose risks to companies, municipalities and sovereigns alike. In the United States, 2017 brought 16 billion-dollar weather and climate events, with a record cumulative cost of US\$306.2 billion. Since 1980, it's estimated that these types of events have cost the United States more than US\$1.5 trillion.²⁶

Droughts alone are estimated to have taken a toll of US\$236.6 billion and caused nearly 3,000 deaths since 1980.²⁷ Colorado and other regions in its watershed are often in the path of severe droughts. Through the Prairie Waters Project, the City of Aurora, Colorado, is taking a proactive approach to protecting and managing its limited natural resources with a view toward long-term resilience. In a rapidly growing metropolitan area, Aurora signals to its residents and business that it is managing resources responsibly and is poised for continued growth despite local climate risk factors.

Long-Term Planning

Issuing long-term debt to support sustainability efforts can be an effective signal of an issuer's commitment to sustainable operations, long-term planning and changing with the market. A company that commits to paying for sustainability projects over a multiyear period is unlikely to abandon its strategy midcourse. Unilever, for example, has built a reputation for long-termism, with a commitment to sustainable operations that includes halving the company's environmental footprint by 2030. The company's CEO, Paul Polman, has been an outspoken critic of quarterly-earnings targets and has attracted more long-term investors to the company as a result.²⁸

Unilever's £250 million green bond supports the company's long-term sustainability strategy, the Sustainable Living Plan. With proceeds going to support long-lived assets such as new and retrofitted factories, the energy, water and waste savings generated by these investments will deliver environmental results for decades to come. Backing up this strategy with debt financing signals that Unilever is going beyond simple cost-cutting measures and making real investments with long-term impact.

These investments also signal to investors that Unilever is evolving with consumer demands for sustainable products. Among U.S. consumers, 87% will buy products based on their values, and 76% say they want companies to address climate change.²⁹

Storytelling

Narrative stories are an important communications tool, but they often lack the measurable results investors are looking for. The dedicated proceeds and transparent reporting requirements of a sustainable bond can provide the tangible evidence that supports an effective narrative about impact.

In the nonprofit sector, the need for measurable impact is ever more important as foundations, government agencies and other funders are scrutinizing their investments for results.

With its inaugural sustainability bond, LISC not only accessed capital markets for much-needed funding, but also amplified the CDFI's potential for impact by developing thriving neighborhoods with flexible financing. The AA credit rating LISC received for the issue is also a strong signal to funders and partners that the organization is well managed and stable for the long term. This can enhance LISC's ability to tell its story to a wide range of stakeholders including community residents, partners and funders.

Freshly Brewed, Sustainably Sourced: Starbucks Sustainability Bond

Historically, sustainable bonds have supported mainly capital expenses such as new facilities, energy efficiency retrofits and renewable energy generation. Starbucks took a different view when it issued the first-ever U.S. corporate sustainability bond in 2016. It looked instead to what is arguably its most important resource—coffee. The US\$500 million bond stands out from the typical green or sustainability bond as it funds procurement of raw materials and invests in the overall sustainability of the supply chain.

Proceeds from the 10-year 2.45% bond were dedicated to sourcing coffee that meets the company's standards for coffee certified against its Coffee and Farmer Equity (C.A.F.E.) practices, a third-party-verified set of standards that Starbucks developed in 2004 for its suppliers that measures environmental and social practices. In addition, Starbucks recognized that in many cases, coffee farmers lack access to traditional financial products needed to help them grow their businesses and meet the C.A.F.E. practices, and set aside funding for loans to coffee farmers.

Following the success of the bond, Starbucks looked internationally to further diversify its investor base and issued a follow-on sustainability bond in Japan, the first-ever Yen sustainability bond by a non-Japanese corporation. The ¥85 billion (US\$740 million) seven-year issue furthers Starbucks' ethical sourcing efforts.³⁰

Beyond raising more than US\$1 billion in total, the dollar- and yen-denominated sustainability bonds send several key signals to Starbucks' investors, including shareholders. First, they amplify Starbucks' sustainability strategy. The company has committed to ethical and sustainable sourcing as one of the four pillars of its sustainability strategy, and has already

surpassed 99% C.A.F.E. certified sourcing.³¹ Through these bonds, Starbucks has demonstrated that it is making a serious investment in reaching the final 1% of its supply chain.

This is also a risk management play. Starbucks' 2016 Form 10-K lists the cost and availability of high-quality coffee beans as a key risk, with climate change, crop disease and other farm-level conditions as contributing factors. Starbucks is not just turning to commodity markets to hedge against price fluctuations. Instead, the company is transparently taking a proactive approach to sourcing in a way that helps mitigate that risk.

By building on-the-ground relationships with coffee farmers and local organizations, Starbucks has also demonstrated a commitment to long-term investments in the farmers, and practices, that it supports. Investments in the supply chain today will deliver value for Starbucks' stakeholders, including investors, well beyond the next earnings cycle.

Finally, the bond proceeds support tangible results that enable Starbucks to tell its sustainability story in a real, impactful way. With consumers increasingly interested in where their food comes from, and a growing number that make purchasing decisions based on values, Starbucks can demonstrate measurable impact through efforts that are closely linked to the success of the business.



Conclusion

In summary, sustainable bonds have matured into a financing tool that offers issuers an ability to raise capital for social and environmental efforts, and investors an opportunity to diversify their sustainable portfolios through fixed income allocations.

Moreover, we believe that the benefits of such bonds for issuers go beyond affordable access to capital. By issuing a green, social

or sustainability bond, an issuer can signal to the investment community that it is making real investments in its strategic sustainability commitments, managing risk proactively and planning for the long term while delivering a meaningful story backed with measurable results.

Notes

- 1 Bloomberg New Energy Finance, January 2018.
- 2 Bloomberg New Energy Finance, January 2018.
- 3 Bloomberg New Energy Finance, January 2018.
- 4 SIFMA Fact Book 2017," SIFMA, August 25, 2017. (<https://www.sifma.org/wp-content/uploads/2016/10/US-Fact-Book-2017-SIFMA.pdf>; accessed on April 3, 2018).
- 5 "Why We Think Green Bonds Will Continue to Grow: A Primer," Serena Tang, et al, Morgan Stanley, 2017.
- 6 "Why We Think Green Bonds Will Continue to Grow: A Primer," Serena Tang, et al, Morgan Stanley, 2017.
- 7 "How Investors Can Help Meet UN Sustainable Development Goals," Scott Mather, PIMCO, <https://blog.pimco.com/en/2017/10/How%20Investors%20Can%20Help%20Meet%20UN%20Sustainable%20Development%20Goals>; accessed on Jan. 22, 2018.
- 8 "Sustainable Signals: New Data from the Individual Investor," Morgan Stanley Institute for Sustainable Investing, 2017 (https://www.morganstanley.com/pub/content/dam/msdotcom/ideas/sustainable-signals/pdf/Sustainable_Signals_Whitepaper.pdf; accessed on Nov. 17, 2017).
- 9 "The Greater Wealth Transfer: Capitalizing on the Intergenerational Shift in Wealth," Accenture, 2015. (https://www.accenture.com/t20160505T020205Z__w__/_us-en/_acnmedia/PDF-16/Accenture-CM-AWAMS-Wealth-Transfer-Final-June2012-Web-Version.pdf#zoom=50; accessed Jan. 22, 2018).
- 10 "Sustainable Signals: New Data from the Individual Investor," Morgan Stanley Institute for Sustainable Investing, 2017 (https://www.morganstanley.com/pub/content/dam/msdotcom/ideas/sustainable-signals/pdf/Sustainable_Signals_Whitepaper.pdf; accessed on Nov. 17, 2017).
- 11 "Larry Fink to CEOs: Contribute to Society or Lose BlackRock's Investment," Alicia McElhane, Institutional Investor, (2018). (<https://www.institutionalinvestor.com/article/b16j67x4y04cvx/larry-fink-to-ceos-contribute-to-society-or-lose-blackrock%E2%80%99s-investment>; accessed Jan. 22, 2018).
- 12 "ESG In Credit Ratings Initiative," Principles for Responsible Investing (<https://www.unpri.org/page/esg-in-credit-ratings-initiative>; accessed Feb. 22, 2018).
- 13 "Moody's ratings incorporate ESG considerations with material credit implications," Moody's, 2017. (https://www.moody's.com/research/Moodys-ratings-incorporate-ESG-considerations-with-material-credit-implications--PR_374170; accessed Feb. 22, 2018).
- 14 "Green Bond Pricing in the Primary Market: Q4 2016 Snapshot," Climate Bonds Initiative, 2017. (https://www.climatebonds.net/files/files/March17_CBI_Briefing_Primary_Market.pdf; accessed Feb. 20, 2018).
- 15 "Why We Think Green Bonds Will Continue to Grow: A Primer," Serena Tang, et al, Morgan Stanley, 2017.
- 16 "Why We Think Green Bonds Will Continue to Grow: A Primer," Serena Tang, et al, Morgan Stanley, 2017.
- 17 "Weekly Brief: Sustainable Finance," Bloomberg, Jan. 10, 2018 (https://newsletters.briefs.bloomberg.com/document/y-tKsXjsQqarnaBOco6J2Q--_9ez2jirxx38zpm72ps/investing; accessed Jan. 10, 2018).
- 18 Calculated from "Weekly Brief: Sustainable Finance," Bloomberg, Jan. 10, 2018 (https://newsletters.briefs.bloomberg.com/document/y-tKsXjsQqarnaBOco6J2Q--_9ez2jirxx38zpm72ps/investing; accessed Jan. 10, 2018).
- 19 "Prairie Waters," City of Aurora (https://www.auroragov.org/residents/water/water_system/water_sources/prairie_waters/; accessed Feb. 20, 2018).
- 20 "Success for France's first sovereign green bond," 2017 (<http://www.gouvernement.fr/en/success-for-france-s-first-sovereign-green-bond>; accessed Nov. 17, 2017).
- 21 "Launch of the green OAT 1.75% 25 June 2039," Agence France Tresor, 2017 (http://www.aft.gouv.fr/articles/lancement-de-l-oat-verte-1-75-25-juin-2039_12865.html; accessed Nov. 17, 2017).
- 22 "2017 Cone Communications CSR Study," Cone Communications, 2017 (<http://www.conecomm.com/research-blog/2017-csr-study>; accessed Nov. 17, 2017).
- 23 "Unilever issues first ever green sustainability bond," Unilever, 2014 (<https://www.unilever.com/news/press-releases/2014/14-03-19-Unilever-issues-first-ever-green-sustainability-bond.html>; accessed Nov. 17, 2017).
- 24 "A New Asset Class in the Making," Morgan Stanley, 2017, (<https://www.morganstanley.com/ideas/lisc-debt-ipo-community-development-bond-issue>; accessed Nov. 17, 2017).
- 25 "France's Energy Transition for Green Growth Act," Planete Energies, 2017 (<https://www.planete-energies.com/en/medias/close/france-s-energy-transition-green-growth-act>; accessed Nov. 17, 2017).
- 26 "Billion-Dollar Weather and Climate Disasters: Overview," NOAA National Centers for Environmental Information (NCEI) , 2018 (<https://www.ncdc.noaa.gov/billions/>; accessed Feb. 22, 2018).
- 27 "Billion-Dollar Weather and Climate Disasters: Overview," NOAA National Centers for Environmental Information (NCEI) , 2018 (<https://www.ncdc.noaa.gov/billions/>; accessed Feb. 22, 2018).
- 28 "Can Unilever's Paul Polman change the way we do business?" Financial Times, (<https://www.ft.com/content/e6696b4a-8505-11e6-8897-2359a58ac7a5>; accessed Nov. 17, 2017).
- 29 "2017 Cone Communications CSR Study," Cone Communications, 2017 (<http://www.conecomm.com/research-blog/2017-csr-study>; accessed Nov. 17, 2017).
- 30 "Starbucks' Debut Yen Bond Adds to Sustainable Investing Menu," Morgan Stanley, 2017 (<https://www.morganstanley.com/ideas/starbucks-sustainability-bond-sustainable-investing>; accessed Nov. 17, 2017).
- 31 "Ethical Sourcing: Coffee," Starbucks, 2018 (<https://www.starbucks.com/responsibility/sourcing/coffee>; accessed Feb. 22, 2018).

Disclosure

This material was published on April 19, 2018 and has been prepared for informational purposes only and is not a solicitation of any offer to buy or sell any security or other financial instrument or to participate in any trading strategy. This material was not prepared by the Morgan Stanley Research Department and is not a Research Report as defined under FINRA regulations. This material does not provide individually tailored investment advice. It has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. Morgan Stanley Smith Barney LLC and Morgan Stanley & Co. LLC (collectively, "Morgan Stanley"), Members SIPC, recommend that recipients should determine, in consultation with their own investment, legal, tax, regulatory and accounting advisors, the economic risks and merits, as well as the legal, tax, regulatory and accounting characteristics and consequences, of the transaction. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives.

This material contains forward-looking statements and there can be no guarantee that they will come to pass. Information contained herein is based on data from multiple sources and Morgan Stanley makes no representation as to the accuracy or completeness of data from sources outside of Morgan Stanley. References to third parties contained herein should not be considered a solicitation on behalf of or an endorsement of those entities by Morgan Stanley.

Morgan Stanley, its affiliates and Morgan Stanley Financial Advisors do not provide tax, accounting or legal advice. Individuals should consult their tax advisor for matters involving taxation and tax planning and their attorney for matters involving legal matters.

Please note that there is currently no standard definition of green bond. Without limiting any of the statements contained herein, Morgan Stanley makes no representation or warranty as to whether a bond constitutes a green bond or conforms to investor expectations or objectives for investing in green bonds. For information on characteristics of the bond, use of proceeds, a description of applicable project(s), and/or any other relevant information about the bond, please reference the offering documents for the bond.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally, the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer.

Investing in fixed income securities involves interest rate risk, credit risk, and inflation risk. Interest rate risk is the possibility that bond prices will decrease because of an interest rate increase. When interest rates rise, bond prices, and the values of fixed income securities generally fall. Credit risk is the risk that a company will not be able to pay its debts, including the interest on its bonds. Inflation risk is the possibility that the interest paid on an investment in bonds will be lower than the inflation rate, decreasing purchasing power.

Foreign fixed income securities may involve greater risks than those issued by U.S. companies or the U.S. government. Economic, political and other events unique to a country or region will affect those markets and their issues, but may not affect the U.S. market or similar U.S. issuers.

Income generated from an investment in a municipal bond is generally exempt from federal income taxes. Some income may be subject to state and local taxes and to the federal alternative minimum tax. Capital gains, if any, are subject to tax.

Credit ratings assigned by nationally recognized statistical rating organizations are one measure of an issuer's creditworthiness. Any actual or anticipated decline in an issuer's credit ratings or increase in the credit spreads charged by the market for taking the issuer's credit risk is likely to adversely affect the market value of the issuer's fixed income securities. Credit ratings are subject to change.

Because of their narrow focus, sector investments tend to be more volatile than investments that diversify across many sectors and companies. A portfolio concentrated in a single market sector may present more risk than a portfolio broadly diversified over several market sectors.

Diversification does not guarantee a profit or protect against loss in a declining financial market.

For more information about the Morgan Stanley Institute for Sustainable Investing, visit morganstanley.com/sustainableinvesting.